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ABSTRACT

This report summarizes the findings of three studies conducted by the Far West Laboratory for Educational Research and Development in San Francisco, California. The first comprised five case studies of school principals. The second synthesized studies on collaborative arrangements for school improvement, and the third is a review of five studies on the role of linking agents in school improvement. The work on public school principals examined the behavior of these individuals in different settings, and showed how community, district, and personal factors interacted with the organizational characteristics of schools to shape instructional management activities and decisions. The review of studies on interorganizational collaboration found that: (1) formal collaborative arrangements are widespread, effective, and influenced by external factors; (2) structure has little influence on effectiveness; and (3) effective collaboration requires strong leadership, mutual ownership of the collaborative effort, congruency of needs and resources among collaborating organizations, and flexible operating procedures. Finally, the study on linking agents indicated that: (1) linkage activities include communication, coordination, resource finding, assistance in information utilization as well as problem solving and program implementation, and administration; (2) support systems were more significant than formal training in shaping linking agents' attitudes and behavior; and (3) linker effectiveness depends on the research focus, external assistance, the nature and magnitude of the innovation, and local support. (MJL)

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School Principals Collaborative Arrangements Linking Agents

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Five Principals in Action: Perspectives on Instructional Management

As a counterpoint to recent research on effective schools, staff of the Instructional Management Program at the Far West Laboratory (San Francisco, California) have completed five case studies of school principals. These studies portray the day-to-day behavior of men and women who work in a variety of public school settings and who approach their responsibilities for instructional management in distinctly different ways. The resulting portraits show how community, district, and personal factors interact with the organizational characteristics of schools to shape instructional management activities and decisions. Although the case studies demonstrate that there are some common factors in the making of a successful school, they also show that there is no single model for the effective principal. Instructional leadership, as portrayed in these studies, does not necessarily mean doing something big and innovative. Rather, it involves knowing and being able to manage effectively the everyday processes and functions that affect the quality of classroom instruction.

Before this study was completed, only Wolcott's *The Man in the Principal's Office* (Holt, Rinehart and Winston, 1973) provided the type of intensive information needed to understand principal behavior. Unfortunately, Wolcott did not examine the relationship between principal management behavior and outcomes. By intensive study of five principals located in a variety of school settings, the Far West Laboratory researchers have produced a grounded image of instructional leadership behavior that visualizes this leadership as accruing from the repetition of routine and mundane acts performed in accord with a principal's overarching perspective on schooling.

The model that guided the case studies set out seven areas of inquiry: principal characteristics, institutional context, community influences, principal management behavior, school climate, instructional organization, and student outcomes. Preliminary studies focused primarily on the first four areas, but information was also gathered on principals' views of the relationship of their behavior to the last three areas. The five case studies suggest that the model is quite adequate. However, the grounded models of individual principals demonstrate that the relative importance of individual categories can change and that individual portraits can require a realignment of conceptual categories. Similarities among the five cases indicate that three antecedent categories—principal characteristics, community context, and institutional context—can be systematically grouped to portray the manner in which these principals perceive their world.

Principal Characteristics. Principals feel that their personal traits, experience, training, and beliefs influence the nature of their activities. Principals say that they are simply more "comfortable" in their work if they can lead in a manner consistent with their own personality and beliefs. The Instructional Management Program researchers speculate that such comfort—a fit between job requirements and personality and experience—increases job satisfaction and promotes longer service in the principalship. Moreover, if principals' styles of leadership are linked to deeply ingrained personal characteristics or experiences, then leadership behaviors may be difficult to change. An awareness of essential principal characteristics, then, may suggest limits for expectations to modify or retrain principals. Such awareness might also be used to match principals to situations and organizations.

Community Context. The impact of community on the behavior of principals was so marked that this category was separated from other external characteristics. The five case studies reveal that principals simultaneously had two distinct views of community influence. On the one hand, the community is viewed as a constraining influence that takes them away from tasks they would rather perform. On the other hand, the school community can provide material and personnel resources that are highly valued in an era of diminishing resources for schools. These principals developed networks of supporters within their community to argue on behalf of their school at board meetings and to volunteer time, serve on committees, and raise funds for new texts, supplementary programs, and building repair.

Institutional Context. Institutional context includes the nested effects of district, state, and federal education agencies and programs as well as the professional networks of local peers and state and national professional organizations. The principals' reactions to district-level programs

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show great variation. In some instances, principals are skeptical about the incursion of the district central office into the local business of their school. In others, principals welcome central office assistance. The five studies reveal different styles of relationships between the principal and the central office, but all five indicate that the principal remains largely in control of important activities. The key to control lies in principals' community relations, their experience within the district, their personal associations with district superiors, or their own inventions of ways to outmaneuver elements of district programs. The reaction to state and federal programs is more uniform, probably because participation translates into increased resources.

In sum, community context and institutional context are very important elements in the views of these five principals. Both elements limit the principals' freedom to act, but at the same time they provide the wherewithal to compensate for limitations in their school's setting. In all instances, the turbulent nature of the larger school context—student turnover, funding cuts, community problems—complicates and broadens the principal's scope of work. An important mediating factor amidst this flux are the principal characteristics that influence the particular behavioral modes or styles that principals assume.

Instructional Management Behavior. In all five cases, principals had a working theory that guided their actions. They all sought to understand how modifications in the structure of their school influenced youngsters. They all believed that their activities affected instruction and student learning. For some, the connection between their activities and developing children's capacity for success in schools seemed remote. For others, it was direct. In all cases, researchers found that they had to take into account not only the discrete **activities** in which the principals engaged but also the **mode** of that behavior, the style or approach that principals take as they lead their organization. Researchers found that mode was closely related to **principal characteristics**. Consequently, the modes of individual principals were highly personalistic and varied. Modes spanned a continuum of strategies ranging from very direct and authoritative styles to indirect and catalytic ones. However, all five principals studied were willing and able to change modes—to step outside their usual framework of behavior—when specific situations indicated the need for change.

A fundamental aspect of the principals' activities was the routine nature of their actions. The Instructional Management Program researchers note: "With their students and their own overarching goals in mind, the principals invested their time in the management of mundane details of their organizations: the physical and emotional elements of the school environment, school-community relations, the teaching staff, schoolwide student achievement, and individual student progress. The principals' most essential activities included forms of monitoring, information control and exchange, planning, direct interaction with students, staff development and hiring, and overseeing building maintenance."

Hiring staff and providing staff training were among the first priorities for all the principals. Planning activities, distribution of material and human resources, and goal setting were other critical cyclic activities. In addition to school calendar cycles, the principals also responded to daily cycles: "First, they roam their buildings as children arrive, assessing potential problems and making sure classrooms are staffed and ready for the day. Next, they return to their offices for short-term planning with assistants, telephoning community members, and receiving the first round of student problems, which at this time of day are frequently related to situations in the students' homes. Then they move, once again, to tour the building as recesses begin, monitoring, solving problems, and communicating with staff and students as they patrol.... Dismissal at the end of the day again brings these principals back to the hallways and public spaces of the buildings, where they admonish or praise, prompt or prohibit in rapid-fire encounters. The ensuing relative calm allows time for reflection and follow-up, parent conferences, teacher conferences, and staff or committee meetings of all sorts.... These are the routine and mundane acts through which principals can assess the working status of their organizations and the progress of their schools relative to long-term goals."

School Climate and Instructional Organization. The Instructional Management Program researchers did not intend to trace the consequences of principals' activities to climate or instructional organization. However, the case studies do provide information on the principals' different views of these relationships: "Royce sees his role as a climate builder and regards instructional organization as largely the responsibility of teachers. Hudson believes that a positive school climate is so essential to the business of schooling that it must be established before significant improvements in the area of instructional organization can be gained. Alexander believes climate is the 'expectation' factor of the school organization. Without students' willingness to work hard, to use the system, the potential of any instructional organization is lost. Delling finds good human relations to be the best approach for changing and improving the organization and outcomes of instruction. Finally, Mann believes climate and instructional organization are really one and the same, that they do not exist separately. He has a difficult time seeing how his activities serve one and not the other simultaneously."

These case studies of five principals are the beginning of an ambitious program of research and development that is generating concepts and techniques to help educators consider how various coordination and management practices at each organizational level—classroom, school, and district—can improve teaching and learning.

Readers who wish to learn more about the Instructional Management Program, its activities, and its publications can write to the Instructional Management Program, Far West Laboratory, 1855 Folsom Street, San Francisco, California 94103. *Five Principals in Action: Perspectives on Instructional Management*, by David D. Dwyer, Ginny V. Lee, Brian Rowan, and Steven T. Bossert, is available from the same source; cost: $3.50, prepaid.

Collaborative Arrangements That Support School Improvement: A Synthesis of Recent Studies

Over the last twenty years, interorganizational arrangements (IOAs) have become an important formal mechanism for supporting school improvement. In requiring, sponsoring, or establishing such arrangements, education policy makers at all levels have acted on the assumption that collaboration will enhance school improvement efforts by extending or multiplying often limited resources and by reducing or preventing duplication of effort. No one knows how many educational IOAs there are. Estimates range between 2,000 and 4,000 nationwide. Despite their apparent ubiquity and utility, interorganizational arrangements themselves have received little attention. Only recently have researchers undertaken to identify and examine IOAs and to relate features to outcomes. In *Collaborative Arrangements That Support School Improvement: A Synthesis of Recent Studies*, Carolyn Cates of the Educational Dissemination Studies Program at Far West Laboratory reviews six recent studies of IOAs:

- R. K. Yin, M. Gwaitney, and J. A. Molitar, *Organizations Collaborating to Improve Educational Practice* (Cambridge, Mass.: Abt Associates, 1981)
- R. G. Havelock, M. Huberman, N. Levinson, and P. Cox, *School-University Collaboration Supporting School Improvement* (Washington, D.C.: Knowledge Transfer Institute, American University, 1981–1982)
- TDR Associates, *Case Studies of Three Urban University-School Collaboratives Mandated for the Improvement of Educational Practice* (Newton, Mass.: TDR Associates, 1981)
- S. McKibbin, *Successful Collaboration for School Improvement: A Case Study* (San Francisco, Calif.: Far West Laboratory, 1981)
- C. S. Cates, P. D. Hood, and S. McKibbin, *An Exploration of Interorganizational Arrangements That Support School Improvement* (San Francisco, Calif.: Far West Laboratory, 1981)
- C. S. Cates, *Industry-Education Collaboration for School Improvement* (San Francisco, Calif.: Far West Laboratory, 1981)

All six studies as well as Cate's synthesis were supported by the Research and Educational Practice Unit of the National Institute of Education as part of a larger effort to improve understanding of how various types of educational organizations relate to one another in accomplishing school improvement projects. For each study, Cates describes the basic features and assumptions of the collaborative arrangements examined, the essential features of the methodology used in the study, and the primary findings and interpretations. Then, she compares and contrasts these findings to derive some conclusions and implications about such arrangements. A summary of her main findings follows.

Formal Collaborative Arrangements Are Widespread and Effective. Formal collaborative arrangements are widely and effectively used to support school improvement efforts. The common view of education organizations, especially of school districts, is that they are generally isolated from one another and that they make few attempts and provide few opportunities to exchange or share resources except through the personal, social, usually informal networks of their own personnel. The studies that Cates reviews reveal the existence of a multitude of formal arrangements through which organizations share and exchange numerous resources to accomplish a wide variety of school improvement efforts. In addition, the studies suggest a multiplicity of connections among collaborating organizations. All six studies strongly indicate that most of the organizations in any given IOA have multiple past and present linkages with many other IOA members. These connections are both formal and informal, both interpersonal and interorganizational.

Most Formal Collaborative Arrangements Arise in Response to External Influence. Most IOAs are initiated in response to some external influence in the form of a mandate or enablement for the improvement effort, the arrangement, or both. The study by Cates, Hood, and McKibbin found that, of the 103 IOAs identified in the San Francisco Bay area, 86 percent originated in response to some type of external influence. Of the eleven IOAs examined in the six studies that Cates reviews, only the Industry Education Council (Cates, 1981) was established solely or predominantly with only member support. Both federal and state influence are evident here. In California, the abundance of IOAs influenced by state programs clearly reflects the emphasis placed on collaboration by the state education agency and the state legislature. In fact, virtually every state improvement program initiated over the past ten years has specified collaboration as one means of participating in the program. For the most part, collaboration has been encouraged rather than required, whether the improvement effort itself was required or not. However, the California State Department of Education has used a variety of incentives and rewards to encourage particular collaboratives and to foster a general collaborative

environment. State-level interest and support are also found in the case studies conducted by Yin, Gwaltney, and Molitar.

Collaborative Arrangements Can Survive. Where collaborative improvement efforts are important to participating organizations, they can and do survive the reduction or elimination of external support requirements. Three studies provide evidence for this finding. Support for two of the three teacher center sites described by Havelock and colleagues was provided either by a federal program or by a foundation. The centers not only survived after external support ended, they maintained or even increased their vitality: In both instances, additional subsites or centers were established. The arrangement among school districts in northern Colorado that Yin, Gwaltney, and Molitar studied had strong federal and state support during its first eight years of operation. Despite difficulties that arose after deep cuts in external support, the arrangement had still managed to provide a variety of services during the three years that preceded the study. A different survival pattern is evident in McKibbin's case study of the Elementary Proficiency Assessment Consortium. In that case, the improvement effort, not the IOA, was mandated. After the consortium had accomplished its original objectives, members enlarged the scope of their objectives and planned to continue their joint tasks.

No One Kind of Arrangement Seems Superior. There is a wide range of workable combinations of organizations for collaborative arrangements, and no one combination seems clearly superior for school improvement or knowledge utilization purposes. Cates, Hood, and McKibbin examined 103 IOAs and identified twenty different combinations of organizations. Four combinations accounted for nearly three fourths of the IOAs in their survey: School districts (LEAs) and county offices accounted for 40 percent of the total, LEAs and institutions of higher education for 11 percent, LEAs and other LEAs for 11 percent, and LEAs and educational R&D agencies for 11 percent. There was no evidence that any one combination was more likely to succeed than others. The predominance of four combinations in the sample just mentioned and the presence of LEAs in all four combinations is a logical consequence of their members' roles and relationships, especially in school improvement efforts.

Structure Has Little Influence on Effectiveness. Structure appears to have little influence on IOA effectiveness or outcomes. While some structural factors can impede or enhance the collaborative process, Cates found no evidence that one structure was superior to another. In particular, the level of formality seemed to have little if any influence on the effective delivery or exchange of resources.

Collaborative Arrangements Follow a Predictable Course. The development and continuation of collaborative arrangements follow a natural, predictable, and complex course, regardless of the particular improvement effort supported and of the presence or absence of external influence. Three of the six studies that Cates reviewed speak directly to this point: McKibbin highlights the stages of development, while Havelock and colleagues and TDR Associates describe the development process and present conceptual models of IOA development. Although the descriptions and models differ somewhat in emphasis and detail, there is substantial consistency among them.

IOA Outcomes Are Multiple. Using an outcome category method developed by Havelock, Cates compares IOA outcomes described by the six studies in terms of power and status changes; linkage changes; knowledge transfer; capacity building, maintenance, and growth; practice improvement; and institutionalization. Although numerous power and status changes were reported, there appeared to be no consistent pattern of changes across the studies at either the individual or organizational level. Important changes in linkage were evident across all six studies. Clearly, even the simplest single IOA can—and usually does—involve complex ties among members that change the nature of their relationships and strengthen their interdependence. In addition, the multiple IOAs increase the multiplexity of ties and interdependencies among many IOA members. Taken together, the six studies show that very substantial amounts of knowledge can be transferred through collaborative arrangements. The content of this knowledge is extremely diverse, especially in IOAs with a specific knowledge utilization or staff development focus. The studies also identify several areas of improved or increased capacity for both individuals and organizations. At both the organizational and the individual level, IOA membership generally provided increased access to resources. Changes in organizational capacity were generally in the nature of fine tuning or of improving existing capacities. Few instances involved a totally new capacity or fundamental organizational changes. Practice improvement at the school level was not particularly prominent, except where it was a specific goal of the IOA. However, the IOAs themselves can be seen as an important practice improvement for member organizations. Finally, institutionalization can be viewed in two ways: as institutionalization of a particular IOA and as development of an ethos of collaboration within and among member organizations. All eleven IOAs examined in case studies were judged likely to continue, although some faced real or potential difficulties. The evidence also suggests that, in most instances, IOA members would collaborate again if existing arrangements were dissolved. In the long term, it may be more important for education organizations to maintain a positive attitude about collaboration and to repeat effective collaborative behavior than it is for a particular IOA to continue. The evidence provided by these six studies indicates that such attitudes and probable behavior do exist in several different states among numerous organizations and for a variety of improvement purposes.

Implications. Cates concludes her synthesis of recent

studies on IOAs by identifying some implications. For simple arrangements, the development and continuation of interorganizational arrangements seem to follow an identifiable process and pattern. Strong leadership is essential to effective collaborative efforts. Mutual ownership of the collaborative effort is also essential, both to enhance its effectiveness and to sustain members' commitment. Finally, while the overall costs of collaboration are often moderate in light of its benefits, costs should not be underestimated.

For complex arrangements, Cates recommends that mandates for IOA participation should include congruent conditions for carrying out the requirements. Sponsoring or mandating agencies should pay particular attention to the congruency of roles, interests, resources, and needs among the types of organizations that may collaborate. Externally imposed structures should include flexible operating procedures to accommodate changes, particularly enlargements, in the goals, objectives, and activities of IOAs. Moreover, sponsoring agencies should have realistic expectations about the costs and benefits of collaborative improvement efforts. Finally, state education agencies tend to be the most appropriate external sponsor.

Collaborative Arrangements That Support School Improvement: A Synthesis of Recent Studies is available from the Educational Dissemination Studies Program, Far West Laboratory, 1855 Folsom Street, San Francisco, California 94103; cost: $6 prepaid.

The Role of Linking Agents in School Improvement

In a related effort of the Educational Dissemination Studies Program at Far West Laboratory, Paul Hood examines five recent studies of the role of linking agents in school improvement:

- Building Capacity for Educational Practice: An Evaluation of NIE's State Dissemination Grants Program (SDGP)
- Study of Dissemination Efforts Supporting School Improvement (DESSI)
- Linking R&D with Schools: The Study of the NIE Research and Development Utilization Program (RDU)
- The Research for Better Schools Local School Improvement Program (RBS/LSI)
- The RBS Study of Regional Educational Service Agencies (RBS/ESA)

To provide a theoretical and empirical foundation for his analysis of these five studies, Hood reviews the theoretical conceptualizations provided by Havelock, Piele, Crandall, and Butler and Paisley, then summarizes recent research reviews by Louis of external linking agents and by Fullen of district and school personnel in knowledge utilization. Next, he examines five aspects of these linking agent studies: the dissemination programs included in the study, the assumptions on which the programs were based, the study methodology, key overall program findings, and findings regarding linking agents. Finally, he synthesizes study findings around five topics. A summary of his main findings follows.

Differences in Linking Agent Roles Across Projects. The programs described in the five studies involved several thousand linking agents. Detailed data were available for 428 persons: 136 associated with the State Dissemination Grants Program (SDGP), 138 with the regional education service agencies included in the RBS/ESA study, 95 with the programs studied by DESSI, 53 with the Research and Development Utilization (RDU) program, and 6 with the RBS Local School Improvement study. Analysis of the descriptions of agent work suggested that three modal forms of assistance or dominant linking agent strategies were represented in the sample of agents: bibliographic and curricular **information utilization** (SDGP), legal and programmatic knowledge utilization **technical assistance** (RBS/ESA), and rational **problem solving** focused on the adoption and implementation of validated programs and products (DESSI, RDU, RBS/LSI).

Hood noted a strong correspondence between linking agents' dominant strategies and the size of their service region: Most information utilization assistance agents (69 percent) were based and served at the local level, while most problem-solving/program implementation agents (72 percent) operated at state, multistate, or national service levels. These data suggest that the knowledge and skills required to accomplish the more complex, specialized, and costly types of school improvement assistance may be in relatively short supply. Thus, they are found only in the organizations created by major federal and state programs. In contrast, the simpler, less costly services can be provided by many education specialists located in intermediate and local education agencies throughout the country.

Selection, Training, and Support for Agents. Information on this topic comes primarily from the RDU study. The RDU researchers concluded that the types of training and support systems employed in the RDU projects were not sufficiently robust or intrusive to counter the basic personality and work styles of the agents. However, the results do indicate that support systems were more significant in shaping attitudes and behavior than the formal training sponsored by RDU projects. Further, researchers concluded that RDU data do not support a "science of selection." That is, only a few characteristics—age, teaching experience, disposition to be supportive and low-profile—emerge as significant predictors, and the influence of these characteristics is not large. Thus, it appears that many different types of persons can perform effectively in RDU field agent positions.

Linking Agent Work. All five studies described agents' work, while four studies used factor analyses to

derive empirical descriptions of linking agent roles. Twenty factors were identified. Hood suggests that these factors can be grouped into six highly generic clusters: a cluster represented by activities concerned with general communication, liaison, coordination, and organizational boundary spanning; a resource-finding cluster; a knowledge use facilitator cluster representing skills especially employed to assist individuals in a broad variety of information use contexts; a curriculum expert/trainer skills cluster; a problem-solving/program implementation assistance cluster; and a miscellaneous cluster that includes a broad variety of administrative, financial, maintenance, housekeeping, self-development, and other functions that have been largely ignored because they are less directly associated with agent–client interaction.

Linking Agent Effects and Outcomes. Four studies provided data on this topic. Hood saw in the data an immensely detailed and complex set of images of the interplay of forces at work in major school improvement efforts. In examining these images, he explored five themes:

First, impacts vary, depending on what researchers look at. Where researchers take a broad view, many significant positive effects and benefits can be found.

Second, external assistance can be important, but the size, nature, and even the positive or negative direction of its influence depend on a number of factors, including where, when, how, by whom, and for whom external assistance is provided.

Third, both the nature of the innovation and the demands that it places on local staff to undertake major changes are important. The data strongly support the adage Little Ventured, Little Gained. Where much was ventured in attempting to accomplish major practice changes, many external and local assistance forces came into play in accomplishing individual and organizational changes that produced a wide variety of benefits.

Fourth, local help from central office staff or school principals is important.

Fifth, local context, including school and staff characteristics, readiness, and motivation, is extremely important in accounting for outcomes.

In the aggregate, Hood concludes, the linking agent studies provide impressive evidence that externally initiated and facilitated change efforts can produce positive changes both in the curriculum and instructional practices of teachers and in the organizational relationships and problem-solving structures and processes of schools. These changes can lead to many organizational and personal benefits for schools, staff, and students.

The Role of Linking Agents in School Improvement is available from the Educational Dissemination Studies Program, Far West Laboratory, 1855 Folsom Street, San Francisco, California 94103; cost: $6, prepaid.

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